



STANFORD RESEARCH INSTITUTE
Menlo Park, California 94025

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FINAL REPORT

PERFORMANCE REPORT ON PROJECT VELA STUDIES

By A. M. Peterson

Prepared for

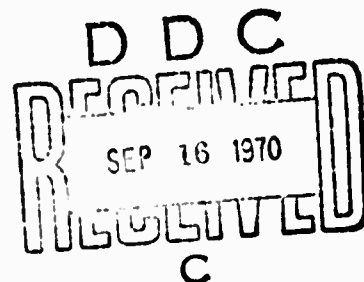
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and

Advanced Research Projects Agency
Strategic Technology Office
Washington, D.C. 20301
Attn: Colonel J. K. Lerohl

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PERFORMANCE REPORT ON PROJECT VELA STUDIES

During the period June, 1965, through September, 1969, Stanford Research Institute completed a series of four VELA studies, as outlined and sponsored by the Advanced Research Projects Agency, Nuclear Test Detection Office, through the Office of Naval Research Contract No. Nonr 4913(00), ARPA Order 215.

These studies were under the leadership of Dr. Allen M. Peterson, who served as principal investigator. Assisting Dr. Peterson during each study were approximately fifty or more members of the scientific community who are leading experts in fields related to the various subjects under investigation.

Throughout these VELA studies, several one- to two-week working group study sessions were held, as well as miscellaneous small meetings. As a result of this work, several different types of reports were generated; i.e., proceedings of meetings, interim special-subject reports, and summary reports, which were written, utilized, and distributed in accordance with the needs of the study and instructions from ONR and ARPA. At the close of each study, a final report was written. To document performance under the above-mentioned contract, we list below the final report for each study.

First Study: Project VELA Summer Study 1965

"PROJECT VELA SUMMER STUDY 1965 ON EMP (U)"

Editors: A. M. Peterson and J. F. Vesecky (March 1967)

SECRET-RESTRICTED DATA, Group 1, SRI-7-356, Copies 1-113.

The distribution list for this report was furnished by ONR, and was published in the report. Recipients included the study participants, those on the VELA Category 4 (EMP) distribution list, as well as ARPA/NTD (4), DDC (20), and ONR (3).

Second Study: Project VELA High-Frequency Study

"PROJECT VELA HIGH-FREQUENCY STUDY: CONCLUSIONS AND RECOMMENDATIONS (U)"

Editors: A. M. Peterson and D. P. Kanellakos (December 1967)

SECRET, Group 1, SRI-8-113, Copies 1-100.

The distribution list was provided by ARPA and ONR. It was not published in the report. Recipients included the study participants, those on the VELA Category 12 (HF) distribution list, as well as ARPA/NTD (10), DDC (20), and ONR (2).

Third Study: Project VELA Trans-Ionospheric Propagation Study

"PROJECT VELA TRANS-IONOSPHERIC PROPAGATION STUDY (U)"

by A. M. Peterson, J. F. Vesecky, G. B. Carpenter, and T. A. Croft (September 1967)

SECRET-RESTRICTED DATA, Group 1, SRI-7-1254, Copies 1-64.

Distribution for this special study was limited. It was made in accordance with a list provided by Colonel R. C. Brouns, Chief, Vela Satellite Branch, ARPA, on 10/19/67. The list was not published in the report. No copies were sent (by SRI) to ONR or DDC.

Fourth Study: Project VELA Systems Study 1968

"PROJECT VELA SYSTEMS STUDY 1968 (U)"

Edited by A. M. Peterson (June 1969)

SECRET-RESTRICTED DATA, Group 1, NOFORN, CNWDI, SRI-9-0891, Copies 1-65.

The distribution list was furnished by Col. J. K. Lerohl, ARPA/NTD, dated 10/22/69. Recipients included various government and contractor personnel, as well as ARPA/NTD (15) and ONR (1). No copies were sent (by SRI) to DDC. The list was published in the report.

Note:

These studies were not, at the outset of the contract, a planned series of four. Each was a special task assigned under the contract between 1965 and 1969. They have not officially been referred to as "First Study", etc. Such reference in this report is merely to identify the separate studies as they occurred.

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